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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/716,798

11/19/2003

A. J. McInnis

TI-36043

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07/31/2007

TEXAS INSTRUMENTS INCORPORATED

P O BOX 655474, M/S 3999

DALLAS, TX 75265

EXAMINER

WIMER, MICHAEL C

ART UNIT

PAPER NUMBER

2821

NOTIFICATION DATE

DELIVERY MODE

07/31/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@ti.com

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Office Action Summary	Application No. 10/716,798	Applicant(s) MCINNIS, A. J.	
	Examiner Michael C. Wimer	Art Unit 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/7/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8, 10-12, 14-16 and 18-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-34 is/are allowed.
- 6) ☒ Claim(s) 8, 10-12, 14-16 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Imamura et al. (6016128).

Regarding Claim 8, Imamura et al. show in Figures 1 and 2, a printed circuit antenna comprising a printed circuit card 11, a first L-shaped section (the lead line of numeral 12 points to the leg of the L) which is parallel to the line connecting a2 and a3 in Fig. 2 and the other leg which runs parallel to the line connecting a1 and a2, and a second L-shaped section disposed on the printed circuit card 11 with two legs, one parallel to and closest to the line defined by a3 and a4, and a second leg parallel to the line a2 and a3 and further away to that line (edge of the card) than the leg of the first L-shaped section. Two adjoining sections are shown (parallel to the edge line defined by a1 and a4) disposed on the printed card 11 joining the respective ends of each L-shaped section in order to define a closed loop, a tap (unnumbered but best shown in Fig. 1 as a vertical pin connecting the leg of the first L-section, numbered with lead line 12) disposed on the printed circuit card and located a distance from the antenna, all arranged as claimed.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 10-12,14-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imamura et al. (6016128).

Regarding Claims 10,15,16 and 18, the size of the antenna is dependent upon its frequency of operation, the impedance desired and the amount of folding back of the closed loop upon itself to provide a self-loading structure. It would have been obvious to the skilled artisan to provide a loop structure in Imamura et al. as small as or less than 0.3 inches at a frequency of 2.45 GHz for the purpose of providing the proper efficiency for radiation purposes with a 50 ohm impedance at the feed point as this is an industry standard impedance for communication antennas.

Regarding Claims 11 and 12, the widths of the conductor that makes up the sections and tap are deemed to be approximately identical. However, it would have been obvious to the skilled artisan to make the widths identical in order to provide impedance matching and maintain the currents equal in the antenna and feeder.

Regarding Claim 14, the ends of the loop are connected to taps, one considered the "feed" line point and the other "ground" by the skilled artisan and found to be obvious in providing two electrical connections.

Claim Objections

5. Claims 8,10-12,14-16 and 18 are objected to because of the following informalities: It is suggested to remove the quotes from the language "L-shaped" as this causes confusion, particularly since some instances of this term do not include closed quotes, and the language may be considered indefinite because it cannot be determined what may be the difference between the language within the quotes or without the quotes. Appropriate correction is required.

Allowable Subject Matter

6. Claims 19-34 are allowed.

Response to Arguments

7. Applicant's arguments with respect to claims 8,10-12,14-16 and 18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Wimer whose telephone number is (571) 272-1833. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W. Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to read "Michael C. Wimer", with a large, stylized flourish at the end.

Michael C. Wimer
Primary Examiner
Art Unit 2821

MCW
7/11/2007